G.VENKATASWAMY NAIDU COLLEGE (AUTONOMOUS)

(Re-Accredited with "A" Grade by NAAC)
Department of B.Sc., Statistics

U23ST6OE - APPLIED STATISTICS

Course Code	Course Title	Category	Lecture	Tutorial	Practical	Credit
U23ST6OE	APPLIED STATISTICS	Extra Department Course Open Elective - (Self Stud	0	0	0	3

Year Semester		Internal Marks (CIA)	External Marks (ESE)	Total Marks	
III	VI	0	100	100	

Course Objective

- The learning objective of the Applied Statistics is to understand the concept of Statistics, Statistical Survey, Index Numbers, measures of demography pertaining to its two basic aspects, viz
- the fertility and mortality, Population Census and Indian Population Census

Course Outcomes (COs)

On the completion of the course the student will be able to

CO	Course Outcome	Knowledge Level (RBT)		
CO1	recall the basic terms in statistics such as statistics, statistical survey, index numbers, vital statistics and population statistics.	K1,K2,K3,K4,K5		
CO2	follow the characteristics of statistics, stages in statistical survey, uses and classification of index numbers, uses of vital statistics and population census.	K1,K2,K3,K4,K5		
CO3	develop the statistical survey, constructing the price index numbers, understand and apply the concept of population census.	K1,K2,K3,K4,K5		
CO4	relation of Statistics to other sciences, time reversal test and factor reversal test, fertility and mortality and relationship between different years of census.	K1,K2,K3,K4,K5		
CO5	determine the importance of statistics, planning and executing of the survey, measures of fertility and mortality and importance and defects of population census.	K1,K2,K3,K4,K5		

K1-Remember; K2-Understand; K3-Apply; K4-Analyze; K5-Evaluate; K6-Create

CO-PO and CO-PSO Mapping (Course Articulation Matrix)

COs		POs						PSOs		
COS	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3
Total	0	0	0	0	0	0	0	0	0	0

⁽³⁻Strong, 2-Medium, 1-Low, -No Correlation)

Course Content

Unit 1: An Introduction to Statistics

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An Introduction to Statistics: Meaning, Definition, Characteristics of Statistics, Nature of Statistics, Scope of Statistics, Relation of Statistics to other sciences, Importance of Statistics.

Unit 2: Statistical Survey

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Statistical Survey: Meaning, Stages in Statistical Survey, Planning the Statistical Survey, Executing the plan of the Survey.

Unit 3: Index Numbers

Index Numbers: Meaning, Uses of Index numbers, Classification of Index Numbers, Methods of Constructing Price Index Numbers, Time Reversal Test, Factor Reversal Test.

Unit 4: Vital Statistics

Vital Statistics: Meaning, Definition, Uses of Vital Statistics, Methods of Collecting Vital Statistics, Measures of Fertility, Measures of Mortality.

Unit 5: Population Statistics

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Population Statistics: Introduction, Population Census, Methods of Collecting Population Census, Indian Population Census, Census of 1931, 1941, 1951, 1961, 1971, 1981, 1991, 2001. Importance of Population Census, Defects of Population Census.

Text Books

1. E. Narayanan Nadar, Statistics (2015), PHI Learning, New Delhi.

Reference Books

- 1. Gun, A.M., Gupta, M.K., and Das Gupta, B., (2012) Fundamentals of Statistics Vol. 1., Eighth Edition, World Press Ltd, Kolkata.
- 2. Gupta, S.C., and Kapoor, V.K., (2002) Fundamentals of Mathematical Statistics, Sultan Chand & Sons, New Delhi.
- 3. Gun, A.M., Gupta, M.K., and Das Gupta, B., (1987) Fundamentals of Statistics Vol. 2. World Press Ltd, Kolkata
- 4. Medhi, J., (2006) Statistical Methods, Second Edition, New Age International Publishers, New Delhi.
- 5. Das, N G., (2019) Statistical Methods vol.1., Eleventh Reprint, McGraw Hill Education Private Limited, Chennai.

Web Resources

- 1. https://www.toppr.com/guides/maths/statistics/bar-graphs-and- histogram/
- 2. https://nptel.ac.in/courses/111/104/111104098/
- 3. https://www.youtube.com/watch?v=R4Ox45iyEBw

Course Designer

Dr. T. SARATHA DEVI, Assistant Professor